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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/790,392	03/01/2004	William L. Grilliot	MOR3334P1071US	2675
32116	7590	01/25/2005	EXAMINER	
WOOD, PHILLIPS, KATZ, CLARK & MORTIMER 500 W. MADISON STREET SUITE 3800 CHICAGO, IL 60661			WELCH, GARY L	
			ART UNIT	PAPER NUMBER
			3765	

DATE MAILED: 01/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/790,392

Applicant(s)

GRILLIOT ET AL.

Examiner

Gary L. Welch

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 01 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Specification***

1. The disclosure is objected to because of the following informalities: It appears that the following changes are required:

Page 2, lines 19-24: Request that the Brief Description of the Drawings for each figure be broken up so that each description is a separate paragraph.

Page 4, line 18: Change "22" to --24--

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

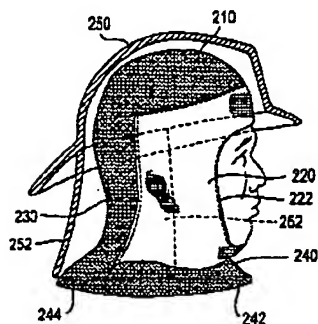
3. Claims 1, 2, 8 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lewis et al. (U.S. 6,766,534).

Lewis et al. discloses a firefighter protective garment 200 having a back portion 230 that is breathable to allow air and water vapor to pass therethrough and a front portion 220 including a fluid-impervious, heat-reflective layer that is continuous from a region near the top of the garment to a region near the bottom of the garment 200.

Figure 4 of Lewis et al. shows the garment 200 worn in combination with a firefighter's helmet 250. Therefore, since the wearer's head is protected with a helmet 250, the top portion of the garment 200 is manufactured from same material as the back

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portion 230. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to increase the wearer's protection by increasing the coverage of the fluid impervious, heat reflective layer nearer the top of the garment 200.

**Fig. 4**

With regard to claim 2, the heat reflective layer is continuous from a region at or near one side of the front portion 220 to a region at or near the other side of the front portion 220 (see Figure 4 where layer extends from right side seam, across face to left side seam).

With regard to claims 8 and 12, the invention is disclosed in the above rejections.

4. Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Worton (U.S. 4,890,336) in view of La Marre et al. (U.S. 3,691,564).

Worton discloses a protective garment 10 having a back portion and a front portion 16. The back portion is fabricated from any lightweight fabric for summer use or any heavily insulated fabric for winter use. The front portion is provided with an additional layer of fireproof material that covers the chest, arms, thighs and zipper area so as to protect the wearer from burns or other injuries. Worton discloses that these areas are more susceptible to burns than the back portions of the garment and

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therefore, there is fireproof material provided to the back portions of the garment to save costs (Col. 1, lines 30-48).

However, Worton does not disclose that the front portion includes a fluid-impervious, heat reflective layer.

La Marre et al. teaches a protective garment 10 worn by welders. The garment 10 is fabricated from 100 percent cotton which is breathable to allow air and water vapor to pass. The front portion 11 of the garment 10 additionally has a layer of highly reflective, water impervious, flexible metallic sheet material such as aluminum foil or aluminum Mylar that extends from the bottom region of the front portion 11 to the top region (Col. 3, lines 19-23). The aluminum material is highly reflective and rejects welding heat and radiant energy thereby keeping the garment and wearer relatively cool (Col. 2, lines 6-17).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the fire-proof material of Worton with the aluminum material sheet as taught by La Marre et al. since the aluminum material is highly reflective and rejects welding heat and radiant energy thereby keeping the garment and wearer relatively cool (Col. 2, lines 6-17).

The garments of Worton and La Marre are directed to welder's garments and there is no mention in the specifications that refers to a firefighter or an emergency worker. However, the preamble of the claim, "For a firefighter or an emergency worker" does not offer any structure that patentably defines over the garments of Worton and La Marre et al. but only defines the environment in which the garment is to be used.

Therefore, the garments of Worton and La Marre et al. inherently have the capability of being used by a wearer to fight a fire or by an emergency worker in performing any emergency duties.

With regard to claim 2, the heat-reflective layer is continuous from a region at or near one side of the front portion to a region at or near the other side of the front portion.

With regard to claims 3 and 13, the invention is disclosed in the above rejections.

With regard to claims 4 and 14, flap 42 is provided with fireproof material, heat reflective material which protects the opening between both sides of the front portion of the garment.

With regard to claims 5 and 9, the front and back portions are provided with breathable moisture and thermal barriers (24, 25, 26). The heat-reflective layer overlays the barriers on the front portion.

With regard to claims 6, 7, 10 and 11, the heat reflective layer is an aluminized polyester film layer (Col. 2, lines 6-17 of La Marre et al.).

With regard to claims 8 and 12, the invention is disclosed in one or more of the above rejections.

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Smith et al. '980 discloses a protective garment fabricated from an aluminized polyester film. Grilliot et al. '781 discloses a firefighter's garment having enhanced thermal insulation while having minimum thickness. Lewis '375, Grilliot et al.


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'556, '520 and '054 and Feduzi et al. '009 disclose various firefighters' garments having differing thermal protection materials at various locations.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gary L. Welch whose telephone number is (571) 272-4996. The examiner can normally be reached on Mon-Fri 5:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John J. Calvert can be reached on (571) 272-4983. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Gary L. Welch  
Primary Examiner  
Art Unit 3765

glw